

# RADIO SHOP

## DESCRIPTION

The Radio Shop operates as an internal service fund in conjunction with Fleet Operations, and serves as the county's communications and electronics center by providing technical support and repair services

for all county-owned radios, pagers, towers, and other communication devices. The Radio Shop focuses on staff technical training and process improvements in order to meet customer needs.

## FINANCIAL ACTIVITY

	<b>FY2002 Actual</b>	<b>FY2003 Adopted</b>	<b>FY2004 Biennial Planned</b>	<b>FY2004 Adopted</b>	<b>Change FY2003 to FY2004</b>	<b>FY2005 Projected</b>	<b>FY2006 Projected</b>	<b>FY2007 Projected</b>
<b>Personnel</b>	\$609,433	\$718,300	\$779,400	\$695,500	-3.2%	\$695,500	\$695,500	\$695,500
<b>Operating</b>	139,819	429,000	696,100	669,500	56.1%	669,500	669,500	669,500
<b>Capital</b>	<u>6,748</u>	<u>64,000</u>	<u>44,000</u>	<u>28,000</u>	-56.3%	<u>28,000</u>	<u>28,000</u>	<u>28,000</u>
<b>Total</b>	\$756,000	\$1,211,300	\$1,519,500	\$1,393,000	15.0%	\$1,393,000	\$1,393,000	\$1,393,000
<b>Revenue</b>	<u>921,701</u>	<u>1,211,300</u>	<u>1,519,500</u>	<u>1,393,000</u>	15.0%	<u>1,393,000</u>	<u>1,393,000</u>	<u>1,393,000</u>
<b>Net Cost</b>	(\$165,701)	\$0	\$0	\$0	0.0%	\$0	\$0	\$0
<b>FT Pos.</b>	13	13	15	13	0	13	13	13

## BUDGET ANALYSIS AND EVALUATION

The upgrade of the E-911 Communications Center to an 800 MHz system was installed and accepted by the county; the warranty period began on April 30, 2002 and will expire on April 30, 2003. The new system triples the size of the previous communications system. The new system links to other localities through a master switch residing in Henrico County, thereby connecting Henrico, Chesterfield, Richmond, and Colonial Heights in a multi-jurisdictional communications system. The Radio Shop staff has taken on-site technical training classes and learned through on-the-job training in order to be adequately prepared to maintain the new system.

The Radio Shop operates as an internal service fund; thus, operating revenues must be sufficient to cover all expenditure needs. County departments that have portable 800 MHz radios are billed on a per-radio, per-month maintenance cost plus any time and materials for extra services performed outside of the services outlined in the maintenance agreement. Additional charges are assessed for large equipment such as towers, radio system backbone, and console dispatch equipment that is located in the E-911

Communications Center. Significant increases in the operating budget can be directly linked to the maintenance costs for the 800 MHz system. The FY2004 budget includes \$280,200 to fund a full year of vendor support for the 800 MHz system; \$57,100 for tower lighting system and site generator maintenance contracts; \$24,000 for additional testing equipment; \$118,000 to purchase radio system parts; and \$4,000 for miscellaneous furniture and equipment.

The FY2004 budget also provides sufficient funding to continue staff training and development. It is vital to the success of maintaining the 800 MHz system that the Radio Shop staff stay abreast of system upgrades, computer networks, and software as they are released and come on line. A personalized career path development program has been formulated for every employee to ensure continuation of world-class customer service and to ensure the high level of maintenance that is necessary for the radio system. A reduction of \$15,200 in personnel costs is due to a part-time position that has not been filled and will not be needed at this time.

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The county has a contractual agreement to maintain the City of Colonial Heights' 800 MHz system as well. Therefore, revenue to be received from Colonial Heights and the expenditures necessary to maintain their equipment has also been included in the FY2004 budget.

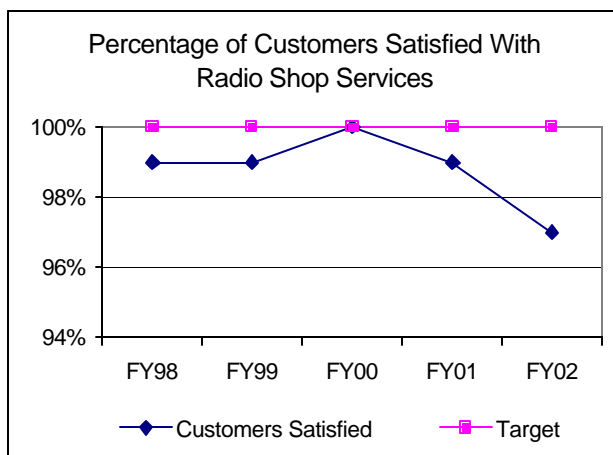
Staff is also heavily involved in the design, procurement, implementation, and installation of the computer-aided mobile data dispatch system (CADS) for public safety. Implementation of the final piece of

the county's emergency communications system will allow transmission of data between the E-911 Center and field units to provide direct access to reporting systems and historical files. Additional costs will be incurred in future years for on-going maintenance of this equipment.

The annual customer service satisfaction survey results for FY2002 indicate a 97 percent satisfaction rating for services performed.

## HOW ARE WE DOING?

**Goal:** Exceed customer expectations. Supports countywide strategic goal number 2  
**Objective:** Improve timeliness and dependability of service  
**Measure:** Percentage of customers satisfied



### Initiatives

- Annual survey
- Focus groups
- Benchmarking
- Training development program

## WHERE ARE WE GOING?

Staff will continue to develop training and maintenance programs for the skill-based career path, to support and maintain the regional integration, policies, and cooperation of radio resources between jurisdictions, and to develop and maintain the existing VHF radio system for school transportation.

The current Radio Shop facility cannot provide for future growth. A new facility must be considered to meet the future space and technology requirements in order to continue to provide world-class customer service. The FY2009 capital improvement program (CIP) provides funding in the amount of \$75,000 to conduct a feasibility study for a vehicle and

communications maintenance facility to comprehensively address all available options.

Beginning in FY2005 staff will be responsible for maintenance of the new mobile, computer-aided dispatch system and the automatic vehicle locator system for public safety agencies. Additional costs will be incurred for on-going maintenance of this equipment. However, operating costs have not been finalized at this time and therefore have not been reflected in the Radio Shop's budget.

Staff is finding that the complexity of sub-systems such as tower lighting is much more technical than ever before. These systems are microprocessor-based

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and computer controlled, requiring expensive maintenance contracts with a vendor, specialized technical training, and an inventory of expensive replacement memory boards. This pattern is following true with every aspect of the new 800 MHz system and will be driving the need for future increases in FY2005 and beyond for outside vendor contracts, additional administrative support, and continuous training for upgrades in vendor software. Staff continues to negotiate with outside vendors to obtain the needed level of maintenance while also

attempting to be as cost efficient as possible. After completion of a full year of maintaining the 800 MHz system for all agencies, operating costs will be reevaluated.

For FY2005 through FY2007 personnel and operating expenses remain constant. Capital funding in FY2005 through FY2007 is projected at \$28,000 each year to address technology and testing equipment replacement needs.